

ABSTRACT

An anode and a battery capable of realizing a high capacity and improving charge and discharge cycle characteristics, and manufacturing methods thereof are provided. An anode active material layer (12) contains a particulate anode active material (12A) including a simple substance or a compound of an element capable of forming an alloy with Li, a particulate binder (12B) including a copolymer of vinylidene fluoride or polyvinylidene fluoride, and a conductive agent (12C). The anode active material layer (12) is formed by using a dispersion medium having a swelling degree of 10% or less to the binder (12B), specifically pure water or the like. The particulate binder (12B) functions as a cushion to absorb expansion and shrinkage of the anode active material (12A) due to charge and discharge, and lowering of electron conductivity caused by generation of cracks or separation is prevented. Further, since the anode active material (12A) is not covered with the binder (12B), electrode reaction is well performed.